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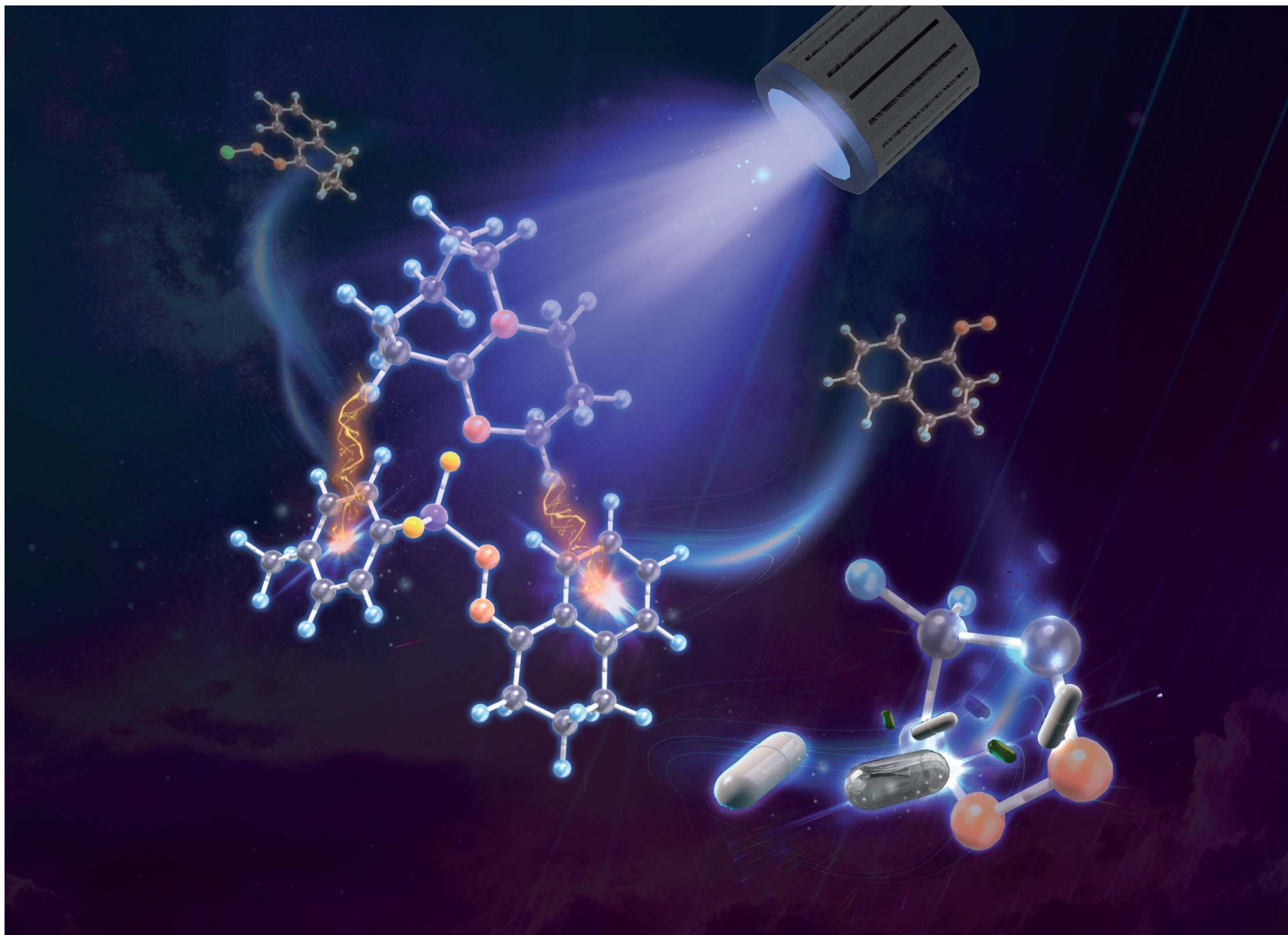
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Fundamental questions
Elemental answers



Showcasing research from Professor Yu Zhang and Wei-Dong Zhang's laboratory, Institute of Interdisciplinary Integrative Medicine Research, Shanghai University of Traditional Chinese Medicine, Shanghai 201203, China.

Visible-light-induced [3+2] cycloadditions of donor/donor diazo intermediates with alkenes to achieve (spiro)-pyrazolines and pyrazoles

We describe visible light-mediated [3+2] cycloaddition reactions to afford pyrazolines and (spiro)pyrazolines bearing a quaternary carbon center. This strategy provides a novel and benign approach to access donor/donor diazo species from corresponding *N*-tosylhydrazones in situ and strongly extends the scope of visible-light mediated [3+2] cycloadditions. This protocol demonstrates tolerance for a broad range of functional groups and can be used to transform a wide range of bioactive compounds into functionalized pyrazoles and pyrazolines.

As featured in:



See Jinxin Wang, Shoubhik Das, Wei-Dong Zhang *et al.*, *Chem. Sci.*, 2023, **14**, 10411.